



Ground Combat Command and Control Family of Systems / ABCS SE&I



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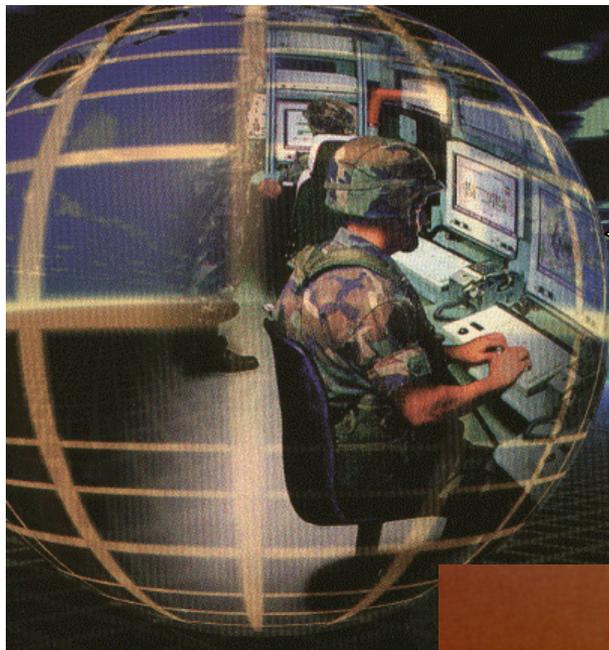
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Ground Combat C2 Family of Systems



CSSCS



**Common SW
Infrastructure
Products**

GCCS-A

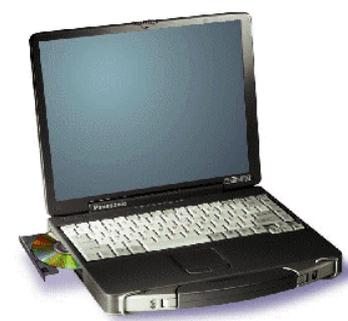


CS



MCS

Versatile Computer Unit (VCU)



Notebook Computer Unit (NCU)



Ground Combat C2 Family of Systems Objective

- ❑ Path for evolution of Common Software (CS), Combat Service Support Control System (CSSCS), Global Command and Control System - Army (GCCS-A) and Maneuver Control System (MCS) programs beyond ABCS 7.0
 - ➔ Single contract implementation of four separate programs to take advantage of similar/common requirements and evolve the software for releases beyond ABCS 7.0; Includes SW development, SW support, fielding support & training support
 - ➔ Programs themselves will not be combined; CSSCS, GCCS-A and MCS will remain unique fielded systems

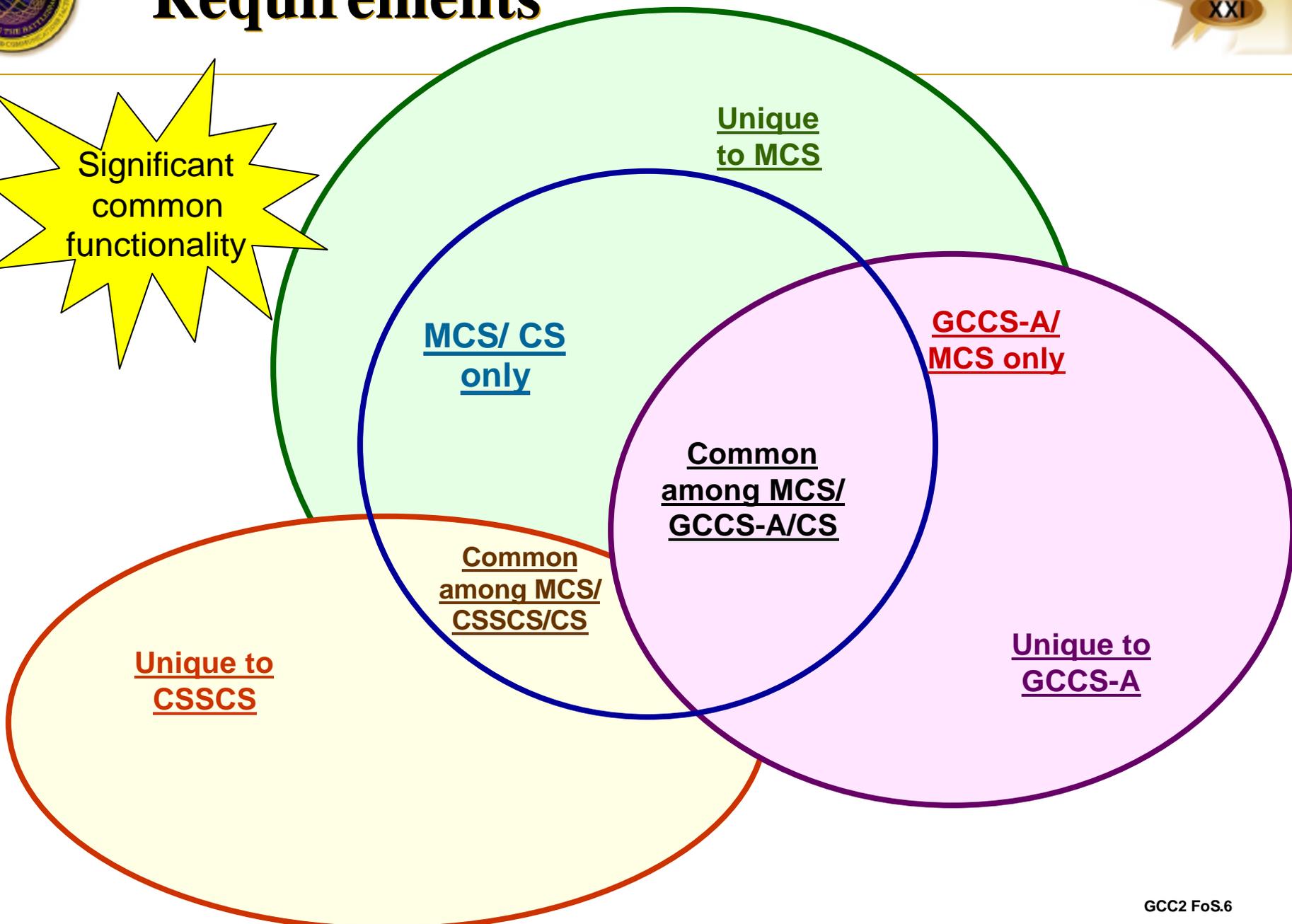
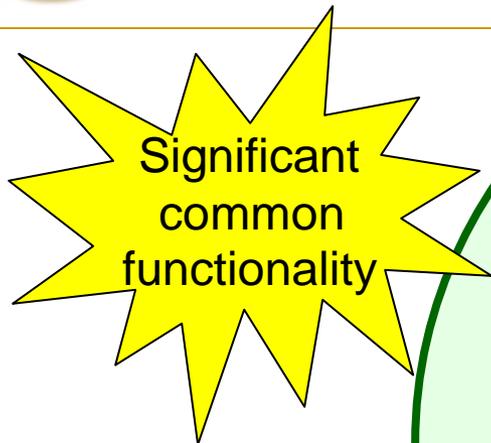


Ground Combat C2 Family of Systems Objective (continued)

- ❑ **Contract will include top level ABCS System of Systems (SoS) architecture design and engineering; software development; software support for existing and new versions; fielding & training support**
 - ➔ **Does not include hardware development / acquisition**



Requirements



Unique to MCS

MCS/ CS only

GCCS-A/ MCS only

Common among MCS/ GCCS-A/CS

Common among MCS/ CSSCS/CS

Unique to CSSCS

Unique to GCCS-A



Major (Significant) Work Elements

- ❑ System of Systems Engineering & Integration (SSE&I)
 - ➔ Top level system of systems architecture and design for ABCS
 - ➔ Baseline is ABCS 7.0 C4ISR documentation
- ❑ Common (Exportable) Infrastructure
 - ➔ Common infrastructure products exported to BASs and integrated with BAS unique applications to become the BAS system
- ❑ Common GC C2 Applications
 - ➔ Applications that are common to CSSCS, GCCS-A and MCS



Major (Significant) Work Elements (continued)

□ Unique GC C2 Applications

→ SW which is integrated with the common infrastructure and common applications to provide the systems:

- CSSCS
- GCCS-A
- MCS

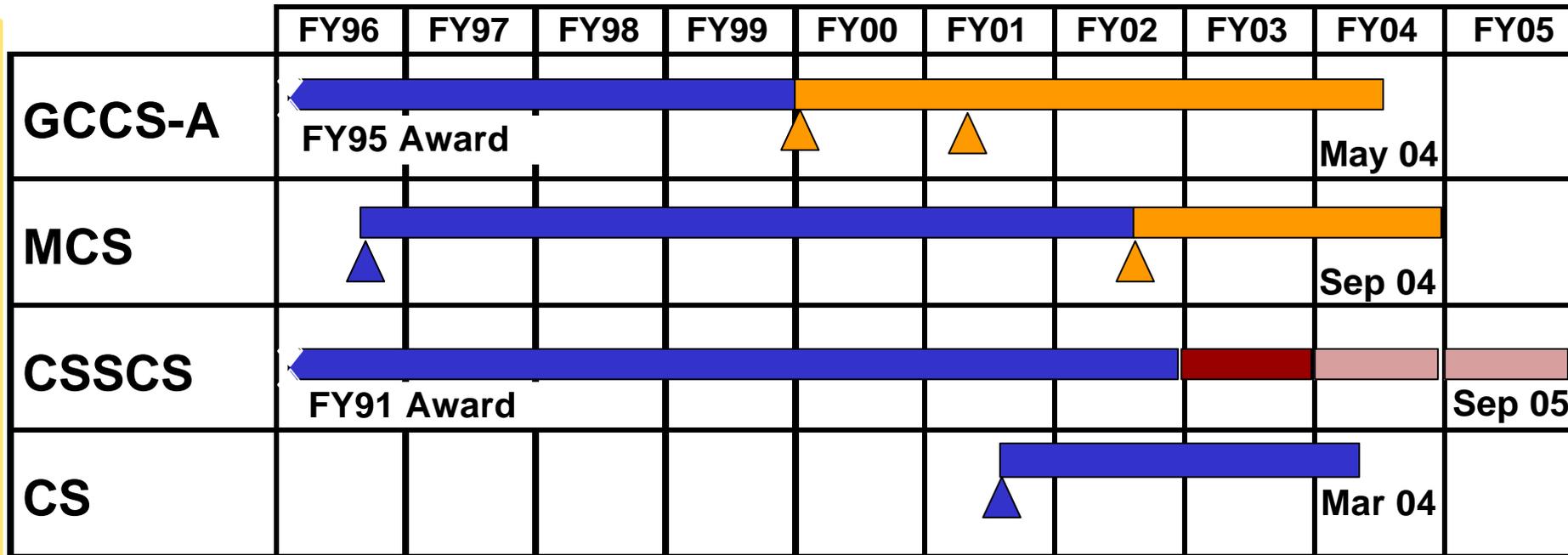
□ Support of Legacy (ABCS 7.0) Systems

- SW maintenance
- Fielding support
- Training



Ground Combat C2 Family of Systems

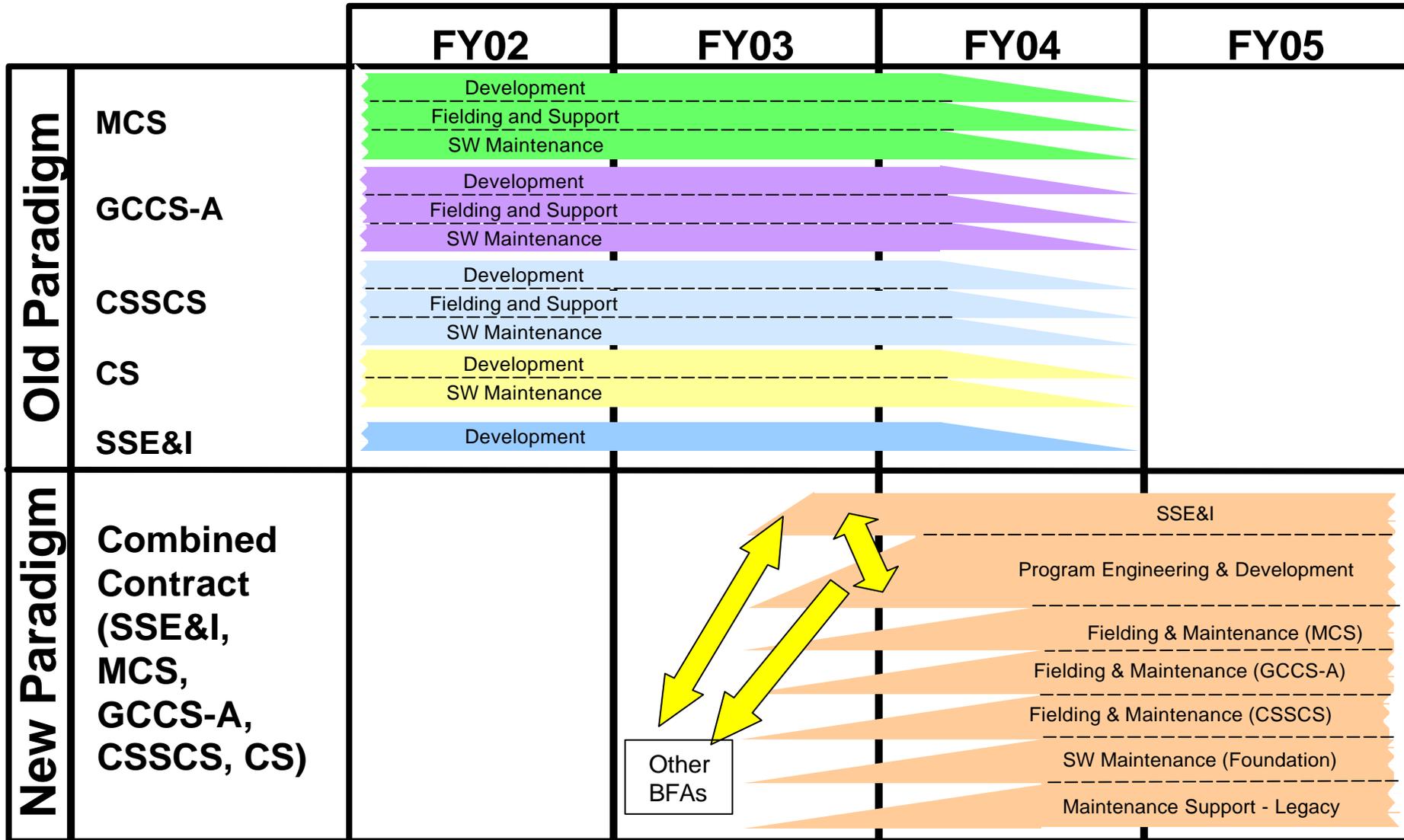
Current Contracts



-  Award
-  Extension
-  Follow on Contract
-  Follow on Options (Annual)

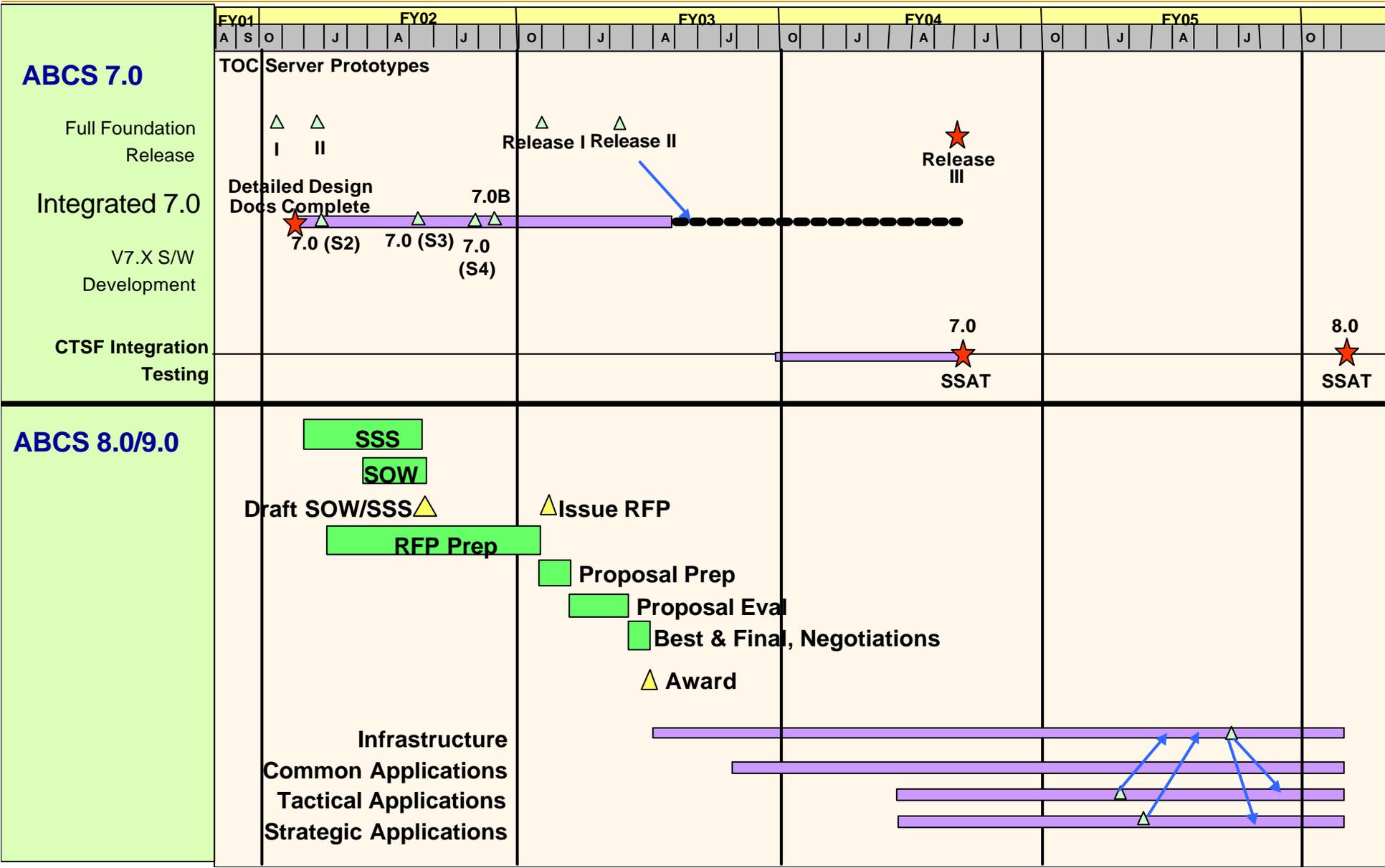


Contractor Responsibilities





Top Level Schedule





Ground Combat Command and Control Family of Systems / ABCS SE&I

- ❑ OBJECTIVE: Single contract implementation of four separate programs to take advantage of similar/common requirements and evolve the software for releases beyond ABCS 7.0; Includes SW development, SW support, fielding support & training support
- ❑ CONTRACT TYPE: TBD
- ❑ ESTIMATED VALUE: \$150M - \$250M
- ❑ KEY MILESTONES (Draft Milestones):
 - ➔ Draft SOW and Spec Released: May 02
 - ➔ Final RFP Released: Nov 02
 - ➔ Award: Apr 03



Ground Combat Command and Control Family of Systems / ABCS SE&I

- ❑ TECHNICAL CONTACT: Linda Johnston, Tech Management Division, PM GCC2, 732-427-6499
- ❑ ACQUISITION CONTACT: Marcia Easton, CECOM Acquisition Center, 732-532-2385
- ❑ SOLICITATION #: DAAB07-02-R-E802



BACKUP



The Army Battle Command System (6.X)



EAC C2



Joint COP



Map & Overlay



Maneuver

- ATO
- Joint COP
- Air Support Request
- JCDB

- OPLAN/OPORD
- Unit Task Organization
- Reports
- JCDB

Maps

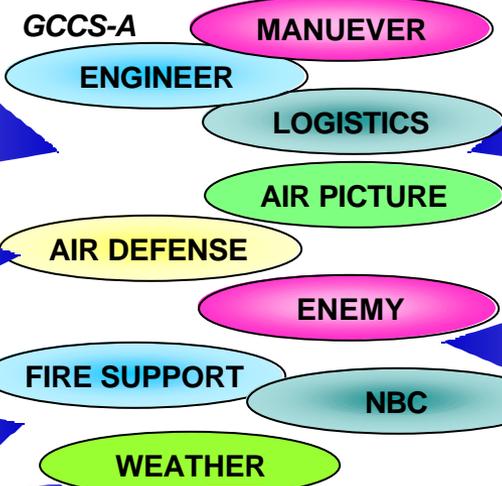


Joint Common Database



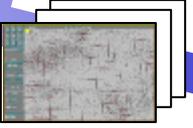
Logistics

- Local Terrain
- "Go/No-Go" Areas
- JCDB



- BRIL / CTIL
- Equipment Status Report
- CSSCS Capability Report
- JCDB

Air Defense



ADA Overlay



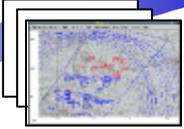
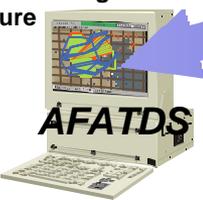
Enemy Overlay

Intelligence



- Secondary Imagery
- Intelligence Summary
- Enemy Locations
- Enemy Geometries
- JCDB

Fire Support



F/S Overlay



Air

Weather



Situation Awareness

Battle Command



- USAF TBMCs Interface (JWID)
- Fire Unit Locations
- Range Fans
- Target Locations
- Radar/Observer Locations
- JCDB

- Weather Effects Matrix
- Battle Scale Forecast Model
- JCDB



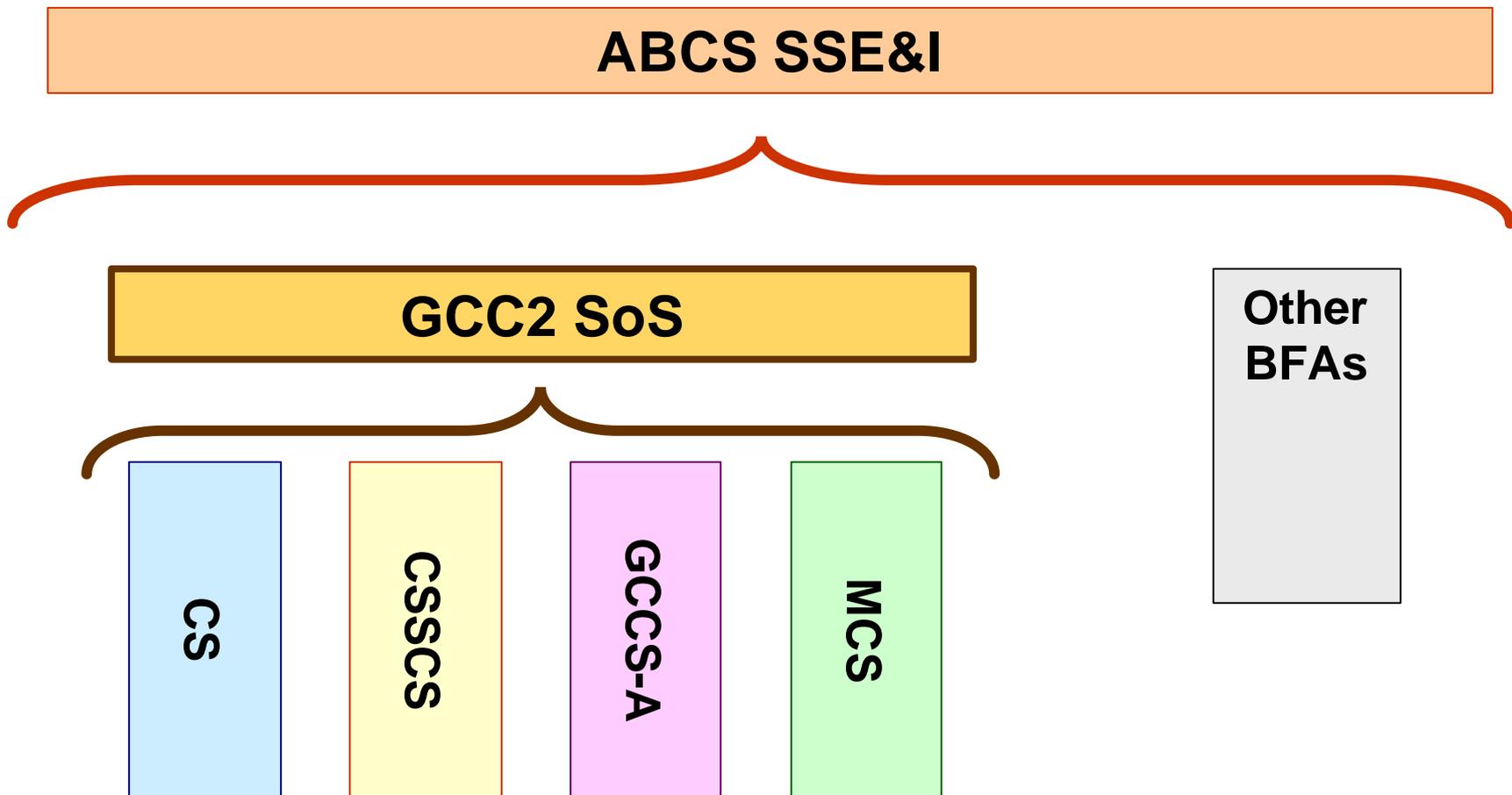
ABCS System of Systems Engineering & Integration (SSE&I)

Mission:

- **Develop top level system of systems architecture and design for the ABCS Battlefield Automation Systems (BASs).**



System of Systems





Common Software

Mission:

- Develop/acquire/integrate/test/manage, for DoD, several key areas within the Defense Information Infrastructure Common Operating Environment (DII COE) which will provide improved interoperability and software reuse for the services. PM Common Software serves as the Army's DII COE Chief Engineer. Provides technical support to the Army and Joint Systems in migration to DII COE infrastructure.

Characteristics/Description

- Client/Server
- Open Architecture
- Four Layer Software Model
- COTS Based

Capability/Improvements

- Data Access
- Latest Software Technology
- Common Message Parsing
- Communications
- Alerts
- Network Management
- Foundation Products/Integration

Special Features

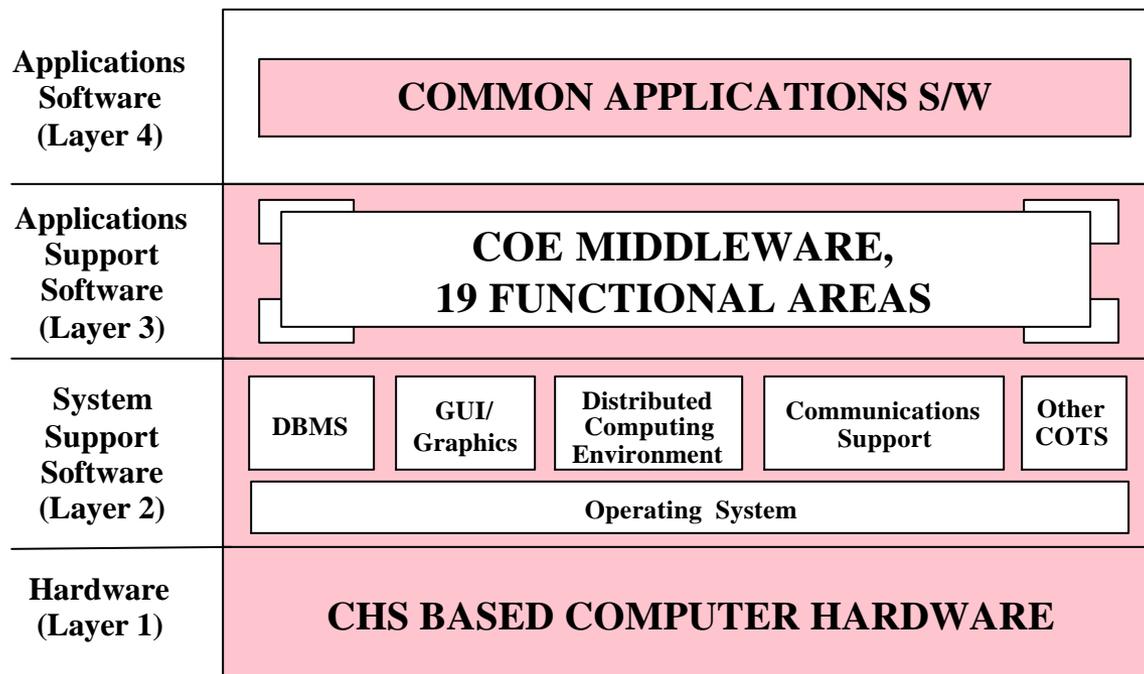
- None



Common Operating Environment

PEO C3T CONCEPTUAL ARCHITECTURE

- The architecture facilitates maintainability, portability, interoperability and reusability
- Common architecture provides the interface to COTS software
 - Promotes product independence
 - Protects the application programs from COTS changes
 - Enhances application portability





Global Command & Control System - Army (GCCS-A)



MISSION:

- Provide critical automated C2 tools for Army Strategic and theater commanders to enhance warfighter capabilities throughout the spectrum of conflict during joint and combined operations in support of the National Command Authority
- Provide interface between Joint and Combined Forces (Joint GCCS) with Tactical Army Battle Command Systems (ABCS)

CHARACTERISTICS/DESCRIPTION:

- Army's strategic and theater C2 system
- Strategic system provides readiness reporting and mobilization and deployment of active, guard, and reserve forces
- Theater system provides Common Operational Picture (COP) and associated information as well as intra-theater planning and movement

CAPABILITY/IMPROVEMENTS:

- Current applications include friendly and enemy unit status; interoperability with Joint and other Service Systems
- Interoperability with ABCS being developed
- Future applications will include improved Strategic/Theater Logistics, Engineer, Medical, Personnel, NBC, Provost Marshal (among others)
- Will maintain compatibility with COE and JTA updates

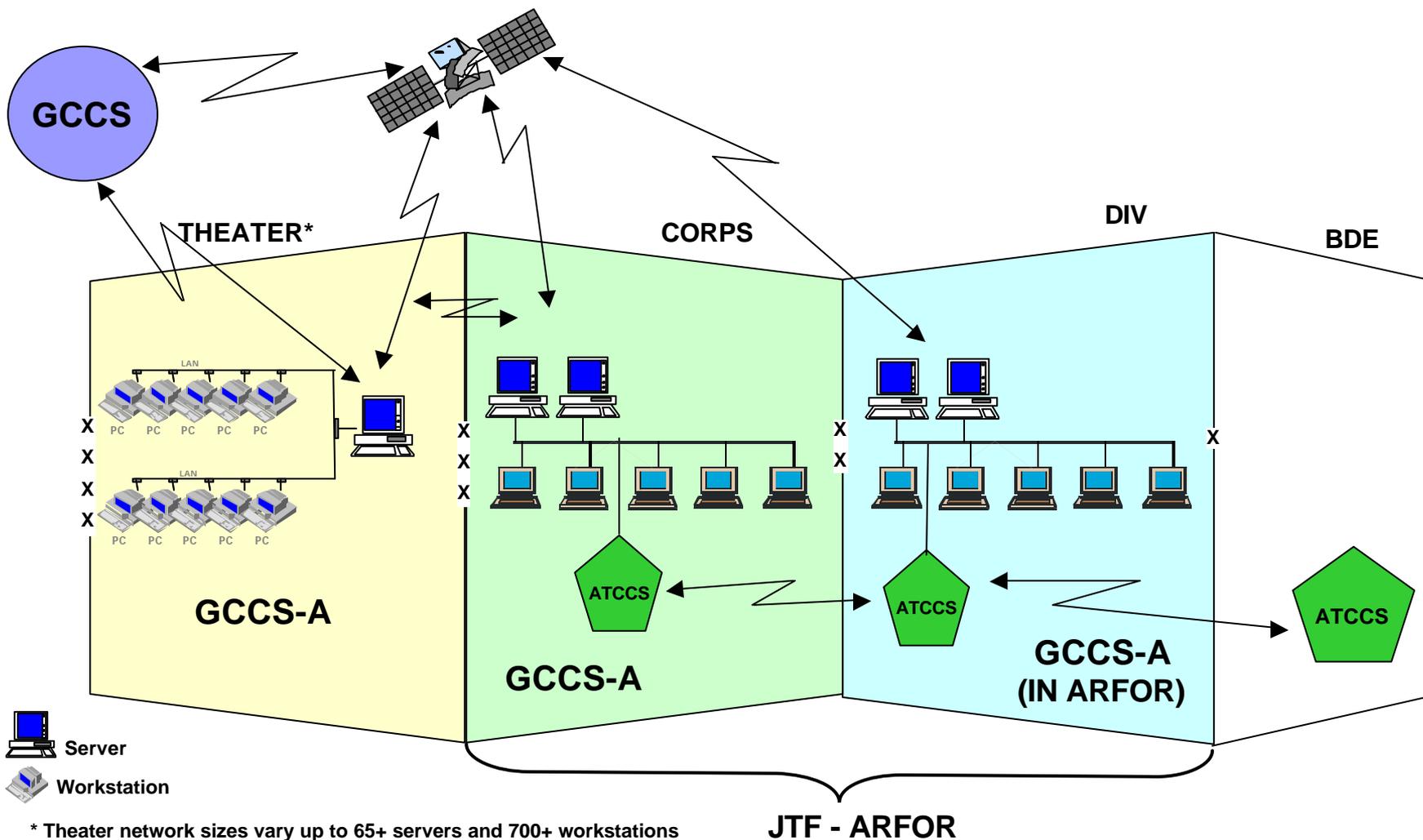
SPECIAL FEATURES:

- Consolidation of AWIS, STACCS and TACCIMS C2 Systems, including Common Worldwide Theater Baseline
- Army implementation of Joint GCCS, COE and JTA Compliant
- Nearly all hardware is COTS
- Significant software reuse
- Operates at Secret/High over DISA SIPRNET



GCCS-A Overview

Providing Link between Tactical Battlefield and Strategic & Theater Commanders





Combat Service Support Control System (CSSCS)

Mission:

- Provide the Combat Service Support (CSS) component of the Army Battle Command System (ABCS)
- Provide the Battle Commanders and CSS Commanders and staffs a Logistic Command and Control decision support tool to practice focused logistics and achieve the transformation objective force

Characteristics/Description

- Operates within ABCS architecture
- Collects, stores, analyzes and disseminates critical logistics, medical, transportation and personnel information
- Computer software system designed to assist CDRS and their staffs in planning and executing logistics operations

Capability/Improvements

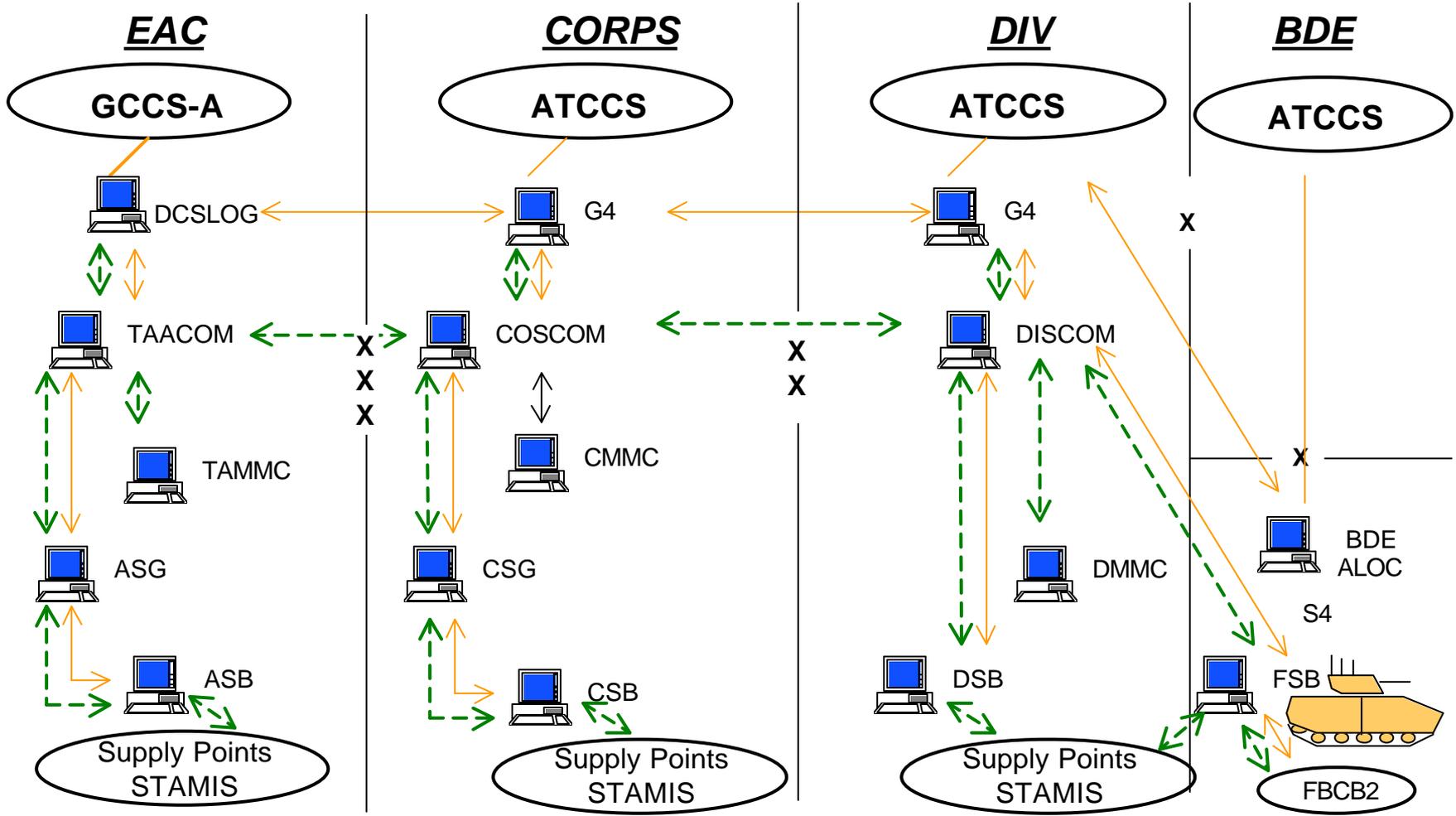
- Version 3 - Initial Operational Capability
- Version 4 - Enhanced CSS and First Digitized Division (FDD) Functionality
 - Initial transportation, medical, and personnel functionality
- Version 5 - Objective tactical functionality; Joint and Combined Operations; First Digitized Corps (FDC) Functionality

Special Features

- Provides CSS C2 for transformation through:
 - Common Hardware/Software
 - Reuse Software
 - System unique capabilities and functionality
 - Housed in a variety of Standard Integrated Command Post System (SICPS) Shelters
 - Technology insertion VIA LOG C2 ATD



CSSCS Overview



Data Flow C2/Unit Status
Log Status

DCSLOG - G4 - G4 - S4
TAACOM - COSCOM - DISCOM
TAMMC - CMMC - DMMC

BDE ALOC





Maneuver Control System (MCS)

Mission:

- Provide corps through battalion force level commanders and staffs the ability to swiftly collect, coordinate and act on near real time battlefield information and to graphically visualize the digitized battlefield.

Characteristics/Description

- Maneuver Battlefield Functional Area (BFA) in Army Tactical Command and Control System
- Provides Commander with Common Picture of the Battlefield
- Uses Common Hardware/Software-2 Hardware

Capability/Improvements

- Commanders' Computer
- Staff Planning
- OPLAN/OPORD
- Resource Management
- Collaborative Planning

Special Features

- Digitization of Battle Command
- Uses Defense Information Infrastructure Common Operating Environment
- Evolution with Future ABCS Capabilities (e.g., ABCS 7.0, 8.0, etc.)



MCS Overview

What:
 Common Hardware
 DII COE Common Software
 MCS Application Modules

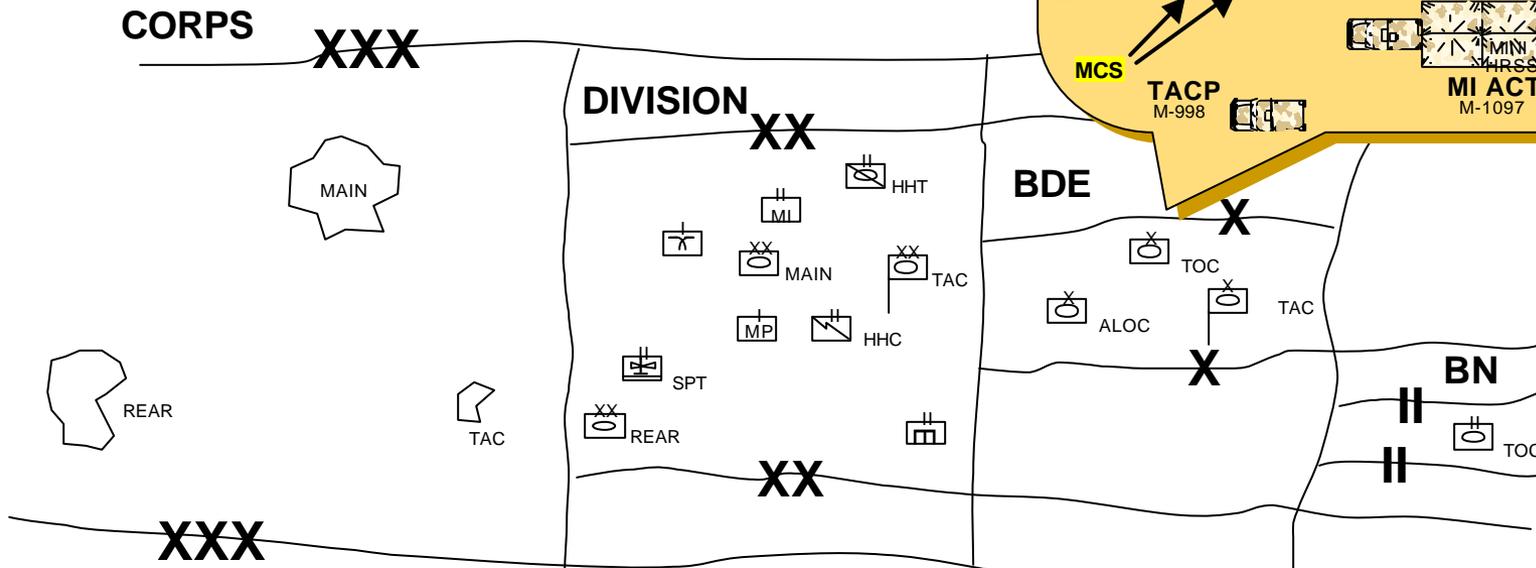
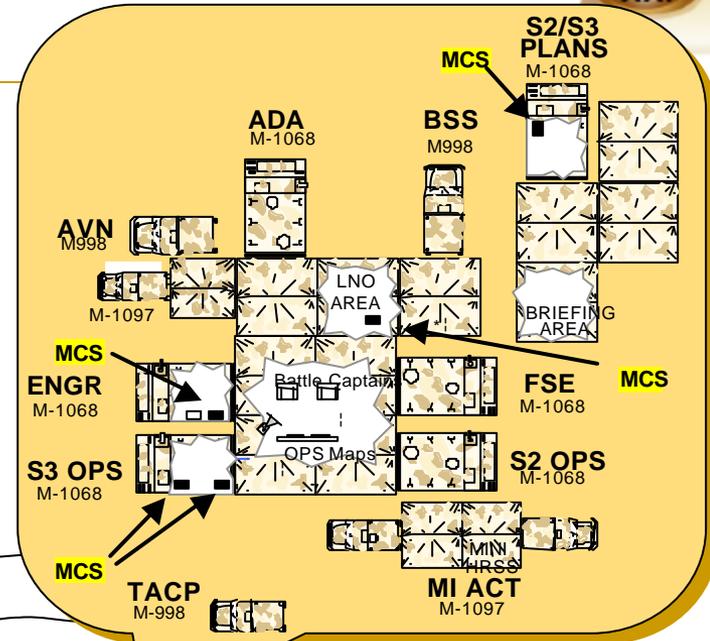
Ultra/Sparc
 (Servers)



Pentium Class
 Laptops



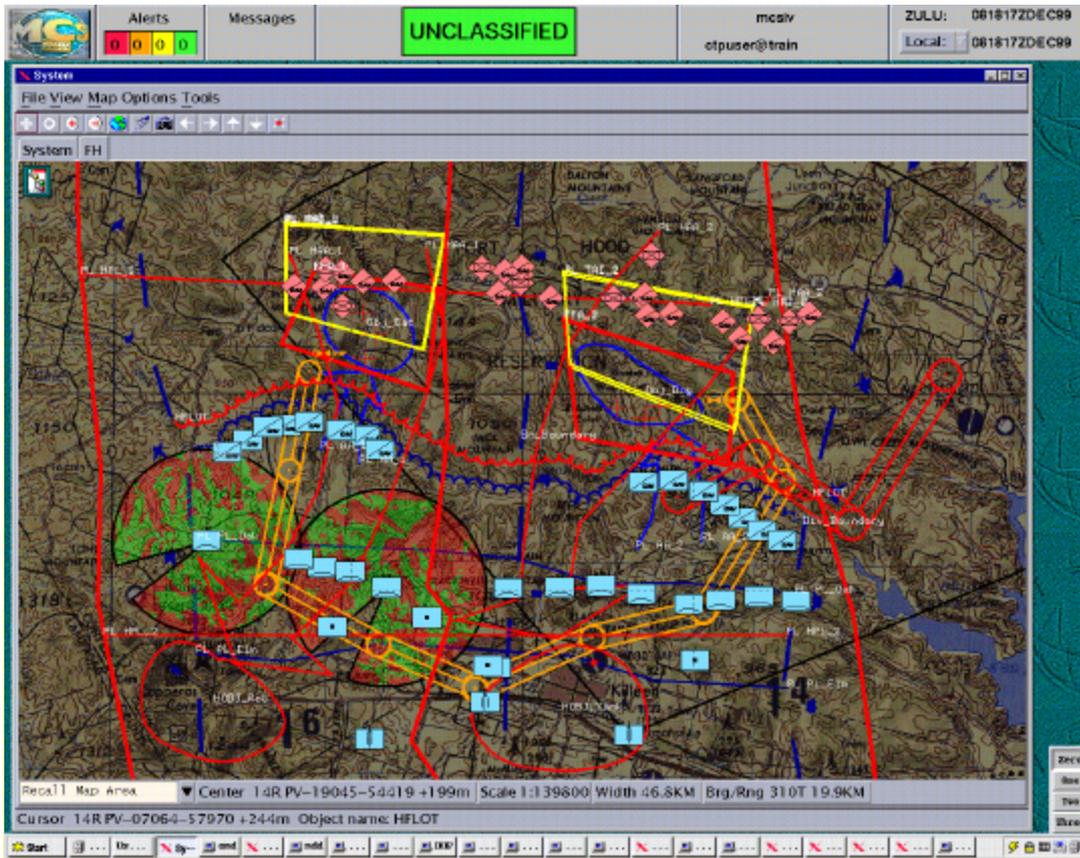
Where:
ALL Armor, Infantry, Aviation, Engineer, Chemical,
 Military Police, Intelligence, Signal, and Special
 Force Units from Corps to Battalion.



	PER CORPS	PER DIVISION	PER BDE	PER BN
SERVERS	184	86	13	3
LAPTOPS	95	103	12	2



Common Tactical Picture (CTP)



- ❑ Centerpiece of ABCS
Common Look and Feel
- ❑ Near-Real-Time Situational Awareness
- ❑ Reflective of Joint Architecture
- ❑ Common, Interactive Database
- ❑ Implemented by all BFACs
- ❑ Allows for an Unparalleled User-Tailored View of the Battlefield